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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,579	02/09/2001	Jeff B. Erwin	06576-105019 (MS #150875.	1605
20786	7590	07/07/2004	EXAMINER VOLPER, THOMAS E	
KING & SPALDING LLP 191 PEACHTREE STREET, N.E. ATLANTA, GA 30303-1763			ART UNIT 2665	PAPER NUMBER 5

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/780,579

Applicant(s)

ERWIN, JEFF B.

Examiner

Thomas Volper

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The first paragraph of the declaration states "I believe I am a original, first and joint inventor". However, there is only *one* inventor listed for the application.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 15 recites the limitation "the identified potential pairs" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Bosa et al. (US 6,115,362).

Regarding claim 14, Bosa discloses receiving segment addresses of selected network segments in the network, wherein each segment includes at least a portion spanning a public switched network and wherein each selected network segment is defined by pairs of segment addresses, obtaining statistical data associated with each identified segment address in the network, analyzing the obtained statistical data to identify similar statistical data and identifying the pairs of segment addresses corresponding to the selected network segments, based on the identified similar statistical data (col. 8., line 1 – col. 9, line 38).

Regarding claim 15, Bosa discloses correlation factors (col. 9, lines 11-38), which meet the limitation of refined statistical data associated with the identified potential pairs. These correlation factors confirm the pairs of segment addresses.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 1-13 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosa et al. (US 6,115,362) in view of Seid et al. (US 5,768,271).

Regarding claims 1 and 16, Bosa discloses creating a list of unmatched data link connection identifiers, polling network devices associated with the data link connection identifier, obtaining statistical data associated with each identified segment address in the network, analyzing the obtained statistical data to identify similar statistical data and identifying the pairs of segment addresses corresponding to the selected network segments (col. 8., line 1 – col. 9, line 38). Bosa fails to expressly disclose that the network is a virtual private network. Seid discloses that Virtual Private Networks (VPNs) are a collection of logical nodes and virtual paths (VPs) and include one or more virtual circuits (VCs) (see Abstract). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a VPN for the network in the invention of Bosa. One of ordinary skill in the art would have been motivated to do this in order to provide added security to the network connections.

Regarding claims 2, Bosa discloses correlation factors, which meet the limitation of refined statistical data associated with the identified potential pairs (col. 9, lines 11-38). These correlation factors confirm the pairs of segment addresses.

Regarding claim 3, Bosa discloses traffic tables (45A-45N) and correlation matrices (46A-46N), which meet the limitation of storing the pairs of segment addresses in a database (see Figure 4).

Regarding claim 4, Bosa discloses a traffic profile of each of the segment address (see Figure 8), which meets the limitation of statistical fingerprints for each segment address.

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Regarding claims 5 and 18, Bosa discloses that the statistical fingerprints of a pair of segment addresses are inverses of each other (col. 8, lines 1-15).

Regarding claims 6-8 and 19, Bosa discloses aggregating a predetermined set of core statistics, which includes the number of bytes sent and received (col. 6, lines 50-64).

Regarding claim 9, Bosa discloses polling network devices for obtaining statistical data (col. 6, lines 50-59).

Regarding claim 10, Bosa discloses that each network device may be a router (col. 6, lines 10-25).

Regarding claims 11 and 12, Bosa discloses that the segment addresses comprise a data link circuit identifier (DLCI) (see Figures 8-10).

Regarding claim 13, Bosa discloses that the method of claim 1 may be implemented in a computer-readable medium having computer-executable instructions (col. 9, lines 48-67).

Regarding claim 17, Bosa discloses polling at predetermined intervals (col. 8, line 52 – col. 9, line 2).

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Iwasaki (US 6,421,319) Network Traffic Monitoring System

- Iwasaki (US 6,381,641) Network Traffic Management System

- Hassell et al. (US 2002/0018473) System and Method for Characterizing Burst

Information

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- Mawhinney et al. (US 6,631,119) System and Method for Measuring the Efficiency of Data Delivery in a Communication Network

- Crooks (US 2002/0055988) Network Topology discovery in a Frame Relay Based Wide Area Network Comprising Multiple Local Area Networks

- Ohyoshi et al. (US 6,118,759) Network System and Frame Relay Switch

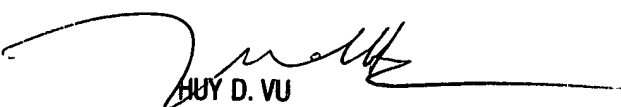
10. Any inquiry concerning this communication, or earlier communications from the examiner should be directed to Thomas Volper whose telephone number is 703-305-8405 and fax number is 703-746-9467. The examiner can normally be reached between 8:30am and 6:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached at 703-308-6602. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Thomas E. Volper



June 23, 2004



HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600